

GLOSSARY

100-year site index tree height – The average height predicted by site index curves for 100-year-old dominant or co-dominant tree species representative of the cover type in a given stand.

124 permit – A permit required under the Montana Stream Protection Act for any project that requires the construction of new facilities or the modification, operation, and maintenance of an existing facility that may affect the natural existing shape and form of any stream or its banks or tributaries. Montana Fish, Wildlife and Parks issues and administers the 124 permit under the regulatory authority of the Montana Stream Protection Act. The Act states that fisheries resources are to be protected and preserved in their natural state except as may be necessary and appropriate after considering all factors involved. The 124 permit process ensures that plans to modify fisheries resources (e.g., stream channel, stream banks, etc.) either eliminate or diminish potential adverse effects to those fisheries resources.

303(d) listings – Section 303(d) of the federal Clean Water Act requires states to assess the condition of their waters to determine where water quality is impaired (does not fully meet standards) or threatened (is likely to violate standards in the near future). The result of this review is the 303(d) list, which must be submitted by each state to the U.S. Environmental Protection Agency every other year. The 303(d) list in Montana is administered by the Montana Department of Environmental Quality.

Abandoned road – A road that is impassable to motorized vehicles and is restricted by a non-passable barrier (class B closure type) or vegetation, but has drainage structures that have not been removed. An abandoned road will not receive motorized use, including low-intensity forest management activities or commercial forest management activities.

Active gravel pit – Any gravel pit or rock source that has excavation, processing, hauling, and/or other uses in a given calendar year. Motorized use of active pits may vary considerably from very limited low use to continuous motorized operation and hauling.

Active subunit – A bear management unit subunit in which DNRC is actively conducting commercial forest management activities.

Adaptive management – The process of monitoring the implementation of conservation measures and potentially adjusting future conservation measures according to what was learned. Adaptive management can also include testing of alternative conservation measures, monitoring the results, and then choosing the most effective and efficient measures for long-term implementation.

Administrative site access road – A road used to access a DNRC administrative office, building or facility.

Animal unit – An animal unit is one mature cow of approximately 1,000 pounds and a calf up to weaning, usually 6 months of age, or their equivalent.

Animal unit month (AUM) – The amount of forage required by an animal unit for 1 month.

Bankfull depth – The depth of water in a stream as measured from the surface to the channel bottom when the water surface is even with the top of the stream bank.

Bankfull flows – The flow that completely fills the channel so that its surface is level with the banks. It is the flow at which channel maintenance is most effective; that is, the discharge is moving sediment, forming or removing bars, forming or changing bends and meanders, and generally doing work that results in the average morphologic characteristics of channels.

Bear – The grizzly bear (*Ursus arctos horribilis*).

Bear management unit (BMU) – A federally defined sub-designation within a grizzly bear recovery zone used for habitat evaluation and population monitoring (*Grizzly Bear Recovery Plan*, USFWS 1993).

Bear-resistant – Secured in a hard-sided camper, vehicle trunk, cab, hard-sided dwelling, hard-sided storage building, approved bear-resistant container, within an effective electric fence, or suspended with the bottom of the item at least 10 feet up and 4 feet out from an upright support.

Bear management unit (BMU) subunit – A federally defined sub-designation of a BMU that approximates a female grizzly bear's home range; BMU subunits are used for habitat evaluation and population monitoring.

Best management practice (BMP) – A practice or combination of land use management practices that are used to achieve sediment control and protect soil productivity and prevent or reduce non-point pollution to a level compatible with water quality goals. The practices must be technically and economically feasible and socially acceptable.

Best management practice (BMP) audit – An established monitoring and reporting process conducted both internally by DNRC (internal BMP audits) and by third parties (statewide BMP audits) to evaluate and document the implementation and effectiveness of BMPs applied on individual DNRC timber harvesting operations and associated site preparation, slash disposal, road construction, and road maintenance activities.

Blocked lands – Areas where parcels owned by DNRC are close to one another. Blocked lands consisting of more than 15,000 acres, or a series of parcels in a checkerboard pattern, or parcels situated in proximity to one another or that lie adjacent to each other and form small- to medium-sized blocks. For the purposes of this HCP, blocked lands refer to those lands exhibiting these characteristics within the Swan River, Stillwater, or Coal Creek State Forests

Board foot – A standard unit for measuring wood volumes. One board foot is a piece of wood 1 foot long, 1 foot wide, and 1 inch thick (144 cubic inches). This measurement is commonly used to express the amount of wood in a tree, sawlog, or individual piece of lumber. A thousand board feet is abbreviated mbf.

Borrow (source or site) – Small sources of gravel, rock, or fill material within 0.25 mile of open or restricted roads. Sizes of borrows can range from small, disturbed areas associated with the removal of several cubic yards of material up to larger areas of 1 acre. For the purposes of the HCP commitments, the number of borrows is not limited when associated with allowable road construction and/or road maintenance activities.

Bottomless arch culvert – A three-sided culvert that allows a natural stream bed in order to achieve substrate and stream flow conditions similar to undisturbed channel conditions.

Box culvert – A concrete (pre-cast or cast-in-place) or metal rectangular culvert, which can be countersunk in the stream bed to provide substrate that emulates natural conditions.

Broadcast burning (also referred to as slash burning) – A controlled burn, where the fire is intentionally ignited and allowed to proceed over a designated area within well-defined boundaries for the reduction of fuel hazard after logging or for site preparation before planting.

Browse (noun) – That part of leaf and twig growth of shrubs, woody vines, and trees available for animal consumption.

Bull trout nodal habitat – Bull trout nodal habitat is a designation developed by the MBTRT during preparation of the Restoration Plan for Bull Trout in the Clark Fork River Basin and Kootenai River Basin (MBTRT 2000). Nodal habitats are those used by sub-adult and adult bull trout as migratory corridors, rearing areas, and overwintering areas and for other critical life history requirements.

Carrying capacity – The maximum livestock stocking rate possible without inducing permanent or long-term damage to vegetation or related resources. The stocking rate may vary from year to year in the same area as a result of fluctuating forage production.

Changed circumstance – Changes in circumstances affecting a species or geographic area covered by a conservation plan that can reasonably be anticipated by plan developers and the USFWS and that can be planned for (e.g., the listing of new species, or a fire or other natural catastrophic event in areas prone to such events) (50 CFR 17.3).

Channel migration zone (CMZ) – The width of the flood prone area at an elevation twice the maximum bankfull depth.

Classified forest trust lands – Montana state trust lands are legally assigned to one of four land use classes. The four classes are grazing, agricultural, forest, and other (which includes

administrative sites, cabin sites, commercial leases, military sites). The basis for classification is to ensure that lands are managed to best meet the Land Board's trust and multiple-use responsibilities and that no lands are sold, leased, or used under a different classification than that to which they belong.

Class A road closures – Road closure types that can be easily opened and made passable for periodic administrative or seasonal public use. This closure class includes: 1) gates - powder river, round pipe, square metal and well casing (does not include wire gates with locks); and 2) guard rail barricades that are locked.

Class B road closures – Road closure types that are not easily passable because they are intended to effectively restrict public and periodic administrative motorized uses by DNRC for extended periods of time. These closure types can typically be removed with the aid of heavy equipment to allow access for future management or emergencies (e.g. wildland fires), but such instances would be infrequent. This closure class includes: 1) bridges that are out; 2) concrete barricades; 3) debris/rocks/log piles; 4) earth berms; 5) gabions; 6) brushed in vegetation (no physical closure); 7) welded guard rail barricades; and 8) re-contoured segments of road.

Class H road closures – Road closure types that generally rely on the honor system. These closure types are not appropriate for areas where grizzly bears may be present. This closure class includes: 1) cable (with or without locks); 2) fences or wire gates (including wire gates with locks); 3) signs; and 4) guard rail barricades that are bolted (not secured with lock or weld).

Class P road closures – Any road closure type that is known present or assumed to be present that is associated with non-industrial private lands where access to a DNRC parcel(s) is restricted by a neighboring private landowner(s). Roads that cross non-industrial private lands are assumed to be restricted to public, commercial, or agency use unless use levels are specifically known.

Class U road closures – Road closures where the specific road closure type is unknown.

Coarse-filter approach (terrestrial) – An approach to maintaining biodiversity as described in the State Forest Land Management Plan (DNRC 1996) that involves maintaining a diversity of structures and species composition within stands and a diversity of ecosystems across the landscape. The intent is to meet most of the habitat requirements of most of the native species. Compare with **fine-filter approach**.

Commercial forest management activities – Timber harvest and salvage harvest activities, which include logging, yarding (including tractor, cable, and helicopter types), hauling, road construction, and road reconstruction.

Connectivity (fish) – Connectivity is the capability of different life stages (e.g., adult or juvenile fish) of HCP fish species to move among the accessible habitats within normally occupied stream segments. For example, a culvert or dam may reduce connectivity by preventing or

impeding upstream or downstream migration. For this HCP, the objective for connectivity will focus exclusively on road-stream crossings.

Connectivity (lynx) – Stand conditions where sapling, pole, or sawtimber stands possess at least 40 percent crown canopy closure, in a patch greater than 300 feet wide.

Conservation commitment – Specific actions and requirements comprising conservation strategies.

Conservation strategy – A collection of conservation commitments intended to meet the goals and objectives of an HCP.

Contingency plan – A plan similar to a mitigation plan, but specifically in response to a changed circumstance that is collaboratively prepared by DNRC and the USFWS. The contingency plan will identify all HCP commitments to be incorporated into projects in response to a changed circumstance and additional commitments negotiated by the two parties. The resource specialist reports prepared in support of the MEPA documentation may also serve as the contingency plan.

Cooperative management response (CMR) – A process by which minor adjustments can be made to improve the HCP or to clarify HCP language.

Cost-share agreement – An agreement between the State of Montana and the USFS Region 1 whereby both parties agree to share in the land costs and road construction and maintenance of mutually used roads in a manner commensurate to the amount of lands being accessed. The resulting agreement is formalized by an exchange of documents issued by each party. The agreement requires that the USFS determine the tributary area being accessed by said road system, and then picking up any third-party shares when there is third-party usage within said road system. Due to other applicable federal laws, the USFS becomes the controlling party of any roadway over state trust lands, with an assumption of liability, maintenance, and future access requests to third parties. The cost-share agreement referred to herein is specifically applicable to the Master Cost Share Agreement, known as the “Montana Master Share Agreement,” and not any other cost-share agreement that the State of Montana or the USFS may periodically enter into independently.

Covered activities – Activities covered by the HCP and incidental take permit. For this HCP, covered activities include selected DNRC forest management activities related to timber harvest, roads, and grazing licenses. Covered activities include commercial forestry activities (e.g., timber harvest, salvage harvest, thinning, slash disposal, prescribed burning, site preparation, reforestation, weed control, fertilization, and inventory); forest management road construction, reconstruction, maintenance, use, and associated gravel quarrying for road surface materials; grazing licenses on classified forested trust lands (see definitions for **grazing license** and **grazing lease**); and roaded access.

Crown closure – The percentage of the ground surface covered by vertical projection of tree crowns. Synonymous with canopy cover and crown cover.

Disturbance regime – All of the various disturbances that may occur in a particular geographic area. There typically would be several types of disturbances, each characterized in terms of its type, size, spatial distribution, frequency, magnitude, and other spatial and temporal characteristics.

Effectiveness monitoring – Monitoring performed to determine whether the HCP conservation commitments being implemented are having the desired biological effect on the given resource or species.

Endangered Species Act (ESA) – The Endangered Species Act (16 USC 1531et seq.), as amended, and its implementing regulations. The ESA is federal legislation that provides a means to ensure the continued existence of threatened or endangered species and the protection of critical habitat of such species.

Engineered substrate – Stream bottom material, such as gravel and cobbles, mechanically placed within a stream channel or culvert to emulate the natural conditions upstream or downstream.

Fall period – The period from September 16 through November 15.

Fine-filter approach – An approach to maintaining biodiversity as described in the State Forest Land Management Plan (DNRC 1996) that is directed toward particular habitats or individual species that might not be adequately considered under a coarse filter approach to management. The habitats may be critical in some way, and the species may be sensitive, threatened, or endangered. See also **coarse-filter approach**.

Fishery – An area of water where fish are caught for recreational or commercial purposes.

Forage (noun) – All browse and herbage that is available and acceptable to grazing animals or that may be harvested for feeding purposes.

Ford – A dip constructed in the roadbed at a stream crossing, instead of a culvert or bridge. The stream bed should be of erosion-resistant material, or such material must be placed in contact with the stream bed.

Forested state trust lands (also referred to as forested trust lands) – Forested state lands managed by the TLMD of DNRC for the economic benefit of the trust beneficiaries and endowed institutions of Montana. These lands are currently managed under the State Forest Land Management Plan and the Forest Management ARMs (36.11.401 through 36.11.450). Forested state trust lands may include trust lands classified under any of the four land use classes.

Full market value – When the purchase price of a property equals the appraised market value.

Geographic information system (GIS) – A computer system used to store and manipulate spatial data for the purposes of producing maps and performing analyses of spatial features. Spatial data maintained within a GIS can represent point, line, and area features on the ground, such as bald eagle nests (points), roads and streams (lines), and habitat types (areas).

Gravel quarrying – As a covered activity is limited to the following actions in support of forest management activities: (1) DNRC’s development and operation of gravel pits and borrow sites, and (2) DNRC’s obtaining, stockpiling, hauling, and unloading gravel from DNRC or non-DNRC borrows or gravel pits. For the purposes of the HCP commitments, the number of borrows is not limited when associated with allowable road construction and/or road maintenance activities. Only medium and large gravel pits count against the allowable number of pits on a given administrative unit within grizzly bear recovery zones and NROH. See also borrow, medium gravel pit, and large gravel pit.

Grazing lease – A lease to graze livestock on trust lands that are classified grazing lands. The minimum rental rate for grazing leases is set by a formula that includes the average weighted price for beef cattle sold in Montana during the previous year. Because grazing leases are issued by the Agriculture and Grazing Management Bureau of DNRC and are not associated with DNRC forest management activities, they are not included as a covered activity under this HCP.

Grazing license – A license to graze livestock on trust lands that are classified forest trust lands. Official written permission to graze a specific number, kind, and class of livestock for a specified period on a defined allotment or management area. Because grazing licenses are associated with DNRC forest management activities, they are included as a covered activity under this HCP.

Green timber – Live trees.

Habitat type group – A system for stratifying the site potential of forest stands based on the habitat type climax vegetation classification system described by Pfister et al. (1977). The system was devised by Green et al. (1992) for the purposes of characterizing old-growth stands in the northern region of the U.S. Forest Service (including the Northern Rockies). Groupings reflect similarity of disturbance response, potential productivity, potential stocking density, potential for down wood accumulation, fire frequency, and tree species. The habitat types within each group also exhibit similar temperature and moisture regimes.

Habitat types – Forest vegetation types that follow the habitat type climax vegetation classification system developed by Pfister et al. (1977).

HCP species – The aquatic and terrestrial species covered by an HCP and incidental take permit. For this HCP, aquatic HCP species are bull trout (*Salvelinus confluentus*), westslope cutthroat trout (*Oncorhynchus clarki lewisi*), and Columbia redband trout (*O. mykiss gairdneri*).

Terrestrial HCP species are grizzly bear (*Ursus arctos horribilis*) and Canada lynx (*Lynx canadensis*).

HCP fish species (HCP aquatic species) – The fish (aquatic) species covered by an HCP and incidental take permit. For this HCP, covered fish species are bull trout (*Salvelinus confluentus*), westslope cutthroat trout (*Oncorhynchus clarki lewisi*), and Columbia redband trout (*O. mykiss gairdneri*).

HCP project area – The lands (including lands added to the HCP pursuant to the transition lands strategy) where the covered activities occur and the lands to which the HCP's conservation commitments apply. The HCP project area includes the blocked lands consisting of the Stillwater, Coal Creek, and Swan River State Forests, as well as numerous scattered parcels throughout the NWLO, SWLO, and CLO as depicted in Appendix C, Figure C-2 in the HCP.

Highway – A numbered federal or state highway.

Hydrologic unit code (HUC) – For the purposes of watershed classification, a unique 11-digit number assigned to individual watersheds by the U.S. Geological Survey.

Hyporheic flow – The percolating flow of water through the sand, gravel, sediments, and other permeable soils under and beside the open streambed.

Implementation monitoring – Monitoring performed to determine whether the HCP conservation commitments are being implemented correctly.

Implementing agreement – The legal document that specifies the HCP terms and conditions and legally binds the USFWS and permit holder (DNRC for this HCP) to the requirements and responsibilities of the HCP and permit.

Inactive subunit – A bear management unit subunit in which DNRC is prohibited from conducting commercial forest management activities.

Incidental take – The taking of a federally listed wildlife species, when that taking is incidental to, but not the purpose of, carrying out otherwise legal activities.

Incidental take permit (Permit) – A permit that exempts a non-federal entity from the take prohibition of Section 9 of the Endangered Species Act (ESA), provided that an approved conservation plan has been developed that specifies the likely take and steps that the applicant will use to avoid, minimize, or mitigate the impacts of the take. A Permit is issued by the USFWS or NMFS or both under Section 10 of the ESA for non-federal applicants.

In-stream shade – The total solar energy affecting the surface of the stream in the stream reach adjacent to the timber harvest unit.

Intermittent stream – Any non-permanent (flows only for part of the year) flowing drainage feature having a definable channel and evidence of annual scour or deposition.

Internal (DNRC) best management practice (BMP) audits – An established monitoring and reporting process conducted internally by a DNRC water resource specialist, soil scientist, and fisheries biologist. The audit procedures are identical to those utilized by the third party audits (statewide BMP audits) to evaluate and document the implementation and effectiveness of BMPs applied on individual DNRC timber harvest operations and associated site preparation, slash disposal, road construction, and road maintenance activities

Large gravel pit – A source of gravel or rock that involves 5 to 40 acres of disturbed area. Large pits receive sporadic intensive levels of use that may be relatively continuous during some operating seasons. Large pits may be activated periodically or continuously to serve as sources for multiple road maintenance and/or construction projects in a given year or across multiple years. Large pits may involve mining, crushing, sorting, and/or asphalt operations over 1 or more years. Large gravel pits are typically subject to rules, regulations, and permitting governed by the Montana Opencut Mining Act (ARMs 17.24.201 through 225) administered by the Montana Department of Environmental Quality).

Large woody debris (LWD) – Dead woody material, including logs, trees, or parts of trees that are greater than 4 inches (10 centimeters) in diameter and are located within a stream or river. Large woody debris contributes to healthy aquatic systems by providing habitat for fish and aquatic insects, supplying nutrients to the stream, trapping sediment, forming pools, and stabilizing banks and stream channels.

Level 1 watershed analysis – A watershed coarse-filter analysis relying primarily on existing data and information, and including documentation of rationale describing those variables that may contribute to cumulative watershed effects, an assessment of adverse cumulative watershed effects risk, and a description of additional detailed analysis, if required.

Level 2 watershed analysis – An evaluation of Level 1 watershed analysis results, field review of the project area, evaluation of baseline existing conditions, and a qualitative assessment of projected effects of proposed actions relative to the baseline existing conditions.

Level 3 watershed analysis – An evaluation of Level 1 and/or Level 2 watershed analysis results, field review of the project area, evaluation of baseline existing conditions, and a detailed quantitative assessment of projected effects of proposed actions relative to the baseline existing conditions.

Low-intensity forest management activities – Timber inventory, timber sale preparation, road location, road maintenance, bridge replacement, mechanical site preparation, tree planting, pre-commercial thinning, prescriptive and hazard reduction burning, patrol of fall/winter slash

burns, heavy and non-heavy equipment slash treatments, monitoring, data collection, and noxious weed management, but not commercial forest management activities.

Lynx habitat – Forest lands consisting of subalpine fir or hemlock habitat types, as described by Pfister et al. (1977). Forest types may be mixed species composition (subalpine fir, hemlock, Engelmann spruce, Douglas-fir, grand fir, western larch, lodgepole pine, and hardwoods), as well as stands dominated by lodgepole pine. Moist Douglas-fir, grand fir, cedar, and Engelmann spruce habitat types where they are intermixed with subalpine fir habitat types also provide habitat for lynx.

Lynx management area (LMA) – Delineated areas that contain DNRC lands that are of notable importance for lynx and where increased levels of HCP lynx conservation commitments are applied. Within these areas, records indicate that lynx are likely present (or have been in the relatively recent past) or lands are considered important for maintenance of resident lynx populations

Medium gravel pit – A source of gravel or rock that involves 1 to 4.9 acres of disturbed area. Medium pits receive intermediate levels of use and may be activated periodically to serve as sources for multiple road maintenance and/or construction projects in a given year or across multiple years. Medium pits may involve excavating, crushing, sorting, and/or asphalt operations.

Microclimate – The physical state of the atmosphere close to a very small area of the earth's surface, often in relation to living matter, such as forests or insects.

Motorized activities – Motorized activities include chainsaw operation and timber felling, pre-commercial thinning, motorized vehicle trips associated with administrative uses, skidding and ground-based yarding operations, aerial yarding, motorized road construction and maintenance, log loading, log processing, and log hauling.

Motorized trail – Any route longer than 500 feet that does not qualify as a “road”, including those routes that conventional four-wheel drive vehicles could negotiate. DNRC does not typically promote or manage off-road trail systems or maintain them as legal accessible roads in the road database. If management intent is to allow such a route to persist in a particular area, they should be classified as open or restricted road where it is consistent management objectives.

Non-denning season – The time of year when grizzly bears are out of hibernation and are active. On the Stillwater Block, this means April 1 through November 30. On all other DNRC lands, this means April 1 through November 15.

Non-habitat areas (lynx) – Permanent non-forested areas such as dry forest types, rock, lakes, meadows, etc.

Non-recovery occupied habitat (NROH) (grizzly bears) – The fixed land area outside the boundaries of established grizzly bear recovery zones where one would reasonably expect to find grizzly bear use occurring during any/most years, as of 2002, as defined by Wittinger (2002).

Non-vegetated gravel pit – Previously forested areas that have fewer than 180 sapling trees per acre or less than 40 percent total stand crown closure.

Noxious weed – A plant specified by federal, state, or local laws as being especially undesirable, troublesome, and difficult to control. It grows and spreads in places where it interferes with the growth and production of native plants or desired crops.

Open road – A road that is generally open to motorized vehicle use. Some open roads could be temporarily restricted for specific management reasons. This includes roads where the status is currently unknown. For the purposes of calculating open road density, open roads shall include: roads open seasonally or yearlong with authorized public use, commercial use, and access for conducting low intensity forest management activities; and roads restricted during the winter period by DNRC that do not limit use during spring, summer or fall periods.

Ordinary high water mark (OHWM) – The stage regularly reached by a body of water at the peak of fluctuation in its water level. The ordinary high water mark is generally observable as a clear, natural line impressed on the bank. It may be indicated by such characteristics as terracing, changes in soil characteristics, destruction of vegetation, presence or absence of litter or debris, or other similar characteristics.

Other suitable habitat (lynx) – Forested habitat within lynx habitat with at least medium stocking levels (at least 40 percent crown closure) in any combination of seedling/sapling, pole, or sawtimber size classes as identified in the DNRC stand level inventory database. Other suitable habitat also includes stands of saplings that contain at least 180 stems per acre that are greater than or equal to 6 feet tall. Other suitable habitat is a subset of suitable lynx habitat but does not contain the necessary attributes to classify as winter foraging habitat or summer foraging habitat.

Parcel – Legally definable tract of land based on a 640-acre section. Portions of a legally described 640-acre section that are less than 640 acres but share a common boundary line (such as a NE 1/4 section and a SE 1/4 section; i.e., a 1/2 section in total) typically are considered as **one** parcel. Portions of a legally described 640-acre section that are less than 640 acres but share a common corner (such as a NE 1/4 section and a SW 1/4 section) typically are considered as **two** parcels. However, multiple 640-acre sections that share common boundary lines (or full 640-acre sections with adjoining smaller units such as an adjacent 40-acre tract) typically are considered as separate parcels. Two or more tracts within a section that are linked through boundary lines (**not** diagonally across corners) typically are considered as one parcel. Parcels may be more specifically defined for purposes such as establishing grazing animal unit months, or for identification in conjunction with acquisition, disposal, or special projects.

Perennial stream – A well-defined channel that contains water year round during a year of normal rainfall with the aquatic bed located below the water table for most of the year.

Physiographic region – A geographic region in which climate and geology have given rise to a distinct array of land forms that are notably different from those of surrounding regions.

Primary closure device – A closure device (e.g., gate, berm, barricade, tank trap etc.) designed for restricting road access situated off of an open road system that is primarily responsible for restricting access on a particular road or road system. Secondary closure devices (similarly – gate, berm, barricade, tank trap, etc.) may or may not be present on road segments behind primary closure devices.

Public road – An open road generally recognized as a county road, may or may not be legally sited.

Reciprocal access agreement – The method established by MCA 77-1-617, whereby DNRC can acquire access to isolated state trust land by exchanging an equal right on trust land. The tract(s) the state is acquiring access to must be isolated in either a legal sense (i.e., there is no legal access to the state land) or there are portions of the tract that have substantial physical restrictions that prevent access. A state tract may have legal access and be burdened by reciprocity as long as one or more state tracts obtain access through the reciprocal agreement. Rights do not have to be equal if the trust beneficiary burdened by reciprocity is compensated.

Reclaimed gravel pit – A gravel pit that has been made capable of supporting the uses those lands were capable of supporting prior to any mining activity, through any combination of the following or other means: backfilling, grading, stabilizing, or re-contouring, and re-vegetating.

Reclaimed road – A road that is impassable to motorized vehicles, but has been stabilized and drainage features, if present, have been removed. The road prism may remain but is restricted by a non-passable barrier (class B closure type) or vegetation. A reclaimed road will not receive motorized use, including low-intensity forest management activities or commercial forest management activities.

Residential access road – a road crossing private or state land that is used primarily to access a private residence.

Resident lynx population – A group of lynx that has exhibited long-term persistence in an area, as determined by a variety of factors, such as evidence of reproduction, successful recruitment into the breeding cohort, and maintenance of home ranges (USFWS 2003).

Rest period – A period during the non-denning season when project activities are restricted or prohibited to provide secure areas for grizzly bears.

Restricted road – A road that is managed to limit use yearlong by motorized vehicles.

Restricted roads have a physical barrier or have access controlled by other landowner(s) that, at a minimum, restricts the use of motorized vehicles by the general public. Physical barriers will be manmade or naturally occurring (gates, barricades, earthen berms, vegetation, eroded road prism, rocks, etc.). Roads that cross non-industrial private land to access DNRC parcels shall be classified as restricted roads until the road status has been verified by easement documents, data updates or other means. Access can be restricted by a class A, class B or class P closure types.

Riparian area – An area of land directly influenced by water or that influences water. Riparian areas usually have visible vegetative or physical characteristics reflecting the influence of water. Riversides and lake shores are typical riparian areas.

Riparian management zone (RMZ) – Under the Forest Management ARMs (36.11.401 through 36.11.450), an RMZ refers to the streamside buffer established when forest management activities are proposed on sites with high erosion risk or on sites that are adjacent to fish-bearing streams or lakes (ARM 36.11.425). For the purposes of this HCP, under the aquatic conservation strategies, the combined SMZ and RMZ are referred to as an RMZ, as defined in the September 2003 version of the ARMs for the Streamside Management Zone (ARMs 36.11.301 through 36.11.312).

Road – Any created or evolved access route (usually with a constructed prism) that is greater than 500 feet long and is or was intended to be reasonably and prudently drivable with a conventional passenger car or pickup. See also abandoned road, administrative site access road, highway, open road, public road, reclaimed road, residential access road, restricted road, seasonally restricted road and temporary road.

Rosgen channel types – A classification system for rivers based on channel morphology that was developed by Rosgen (1994). Stream reaches are divided into seven major stream type categories (Aa+, A, B, C, D, DA, E, F, and G) that differ in entrenchment, gradient, width/depth ratio, and sinuosity in various landforms. The major categories can be further broken down into sub-categories based on dominant channel materials.

Salvage harvest – The removal of dead trees or trees damaged or dying because of injurious agents other than competition (such as fire, insects, disease, or blowdown) to recover the economic value that would otherwise be lost (ARM 36.11.403).

Scattered lands [scattered parcel(s)] – Any DNRC section or parcel that is not part of blocked lands. For the purposes of this HCP, blocked lands are identified within the Swan River, Stillwater, or Coal Creek State Forests.

Seasonal restricted road – a “restricted road” where access is limited seasonally between specific dates.

Secondary closure device – Any closure device (e.g., gate, berm, barricade, tank trap etc.) that is secondarily restricting access and is situated on a restricted road or restricted road system behind a primary closure device.

Security core areas – Designated areas on federal lands greater than 2,500 acres that during the non-denning period for grizzly bears are: (1) free of motorized access; (2) consider the geographic distribution of seasonal habitats important for grizzly bears; (3) remain in place for periods of 10 years or more; and (4) are at least 0.3 mile from the nearest access route that can be used by a motorized vehicle.

Sight distance – The distance at which 90 percent of an animal is hidden from view. On DNRC lands, this is approximately 100 feet, but may be more or less, depending on specific vegetative and topographic conditions.

Site potential tree height (SPTH) – The average maximum height for mature trees on a site, given the local growing conditions.

Spring habitat – Low-elevation sites or other sites that maintain less snow during the spring period (e.g., avalanche chutes, riparian areas, wet meadows, swamps), which are particularly important for offsetting bears' nutritional stress following hibernation. On the Stillwater Block, spring habitat is modeled using habitat value functions following Mace et al. (1999) and occurs in areas associated with roads possessing restricted status during the spring period. Spring management restrictions apply to the Stillwater Block from April 1 until June 16 within non-spring habitat, and from April 1 until July 1 within spring habitat. Spring habitat on the Swan River State Forest includes all areas below 5,200 feet in elevation. Spring habitat on DNRC scattered parcels refers to lands below 4,900 feet in elevation.

Spring period – For the Stillwater Block, this is April 1 through June 15 for non-spring habitat and April 1 through June 30 for areas within spring habitat. For lands within the Swan River State Forest and DNRC scattered parcels in recovery zones and non-recovery occupied habitat, this is April 1 through June 15.

State of Montana bull trout core habitat – A designation developed by the Montana Bull Trout Restoration Team (MBTRT), a state appointed entity, during preparation of the *Restoration Plan for Bull Trout in the Clark Fork River Basin and Kootenai River Basin Montana* (MBTRT 2000). Core habitat areas are watersheds (including tributary drainages and adjoining uplands) used by migratory bull trout for spawning and early rearing and by resident bull trout for all life history requirements. Core areas typically support the strongest remaining bull trout populations of spawning and early rearing habitat within a restoration/conservation area and usually occur in relatively undisturbed watersheds. Twelve restoration/conservation areas were established in Montana and delineated by the Montana Bull Trout Scientific Group. Restoration/conservation areas have been delineated largely because of fragmentation of historically connected stream systems used by bull trout. These restoration/conservation areas

essentially function as smaller, individual bull trout metapopulations. See MBTRT (2000) for additional information.

Statewide best management practice (BMP) audits – An established monitoring and reporting process conducted by third parties to evaluate and document the implementation and effectiveness of BMPs that are applied on timber harvest operations and associated site preparation, slash disposal, road construction, and road maintenance activities by various different landowner groups, including DNRC. Audits are conducted every two years by interdisciplinary teams comprised of individuals representing landowners, federal and state natural resource agencies, the timber industry, and conservation groups.

Stillwater block – The blocked portions of the Stillwater and Coal Creek State Forests within the Northern Continental Divide Ecosystem recovery zone as identified in the Stillwater Block Transportation Plan Map (Appendix C, Figures C-4A and C-4B).

Stream order – A stream numbering system ranging from 1 to 6 or higher, which ranks streams beginning from the headwaters to a river terminus, and designates the relative position of a stream or stream segment in a drainage basin network. First-order streams have no discrete tributaries; the junction of two first-order streams produces a second-order stream; the junction of two second-order streams produces a third-order stream; etc.

Streamside management zone (SMZ) – A stream, lake, or other body of water and an adjacent area of varying width where management practices that might affect wildlife habitat or water quality, fish, or other aquatic resources need to be modified. SMZ encompasses a buffer strip of at least 50 feet wide on each side of a stream, lake, or other body of water, measured from the ordinary high water mark, and extends beyond the high water mark to include wetlands and areas that provide additional protection in zones with steep slopes or erosive soils.

Suitable lynx habitat – Forest stands within habitat types considered to be preferred by lynx that possess at least a medium stocking level (at least 40 percent crown closure) in any combination of seedling/sapling, pole, or sawtimber size classes as identified in the DNRC stand level inventory database. Suitable lynx habitat also includes stands that contain at least 180 stems per acre greater than or equal to 6 feet tall. On the Northern and Southwestern Land Offices, suitable lynx habitat includes the subsets of summer foraging habitat, winter foraging habitat, and other suitable habitat categories. On the Central Land Office, suitable lynx habitat is defined as stands occurring between 5,500 to 8,000 feet elevation that possess at least medium stocking levels (at least 40 percent stand crown closure) in any combination of pole and/or sawtimber size classes as identified in the DNRC stand level inventory database.

Summer foraging habitat (lynx) – Dense sapling stands and moderate to densely stocked poletimber stands within suitable lynx habitat that possess abundant horizontal cover.

Summer period – For the Stillwater Block, this is July 1 through September 15. For lands within the Swan River State Forest and DNRC scattered parcels, this is June 16 through September 15.

Swim performances – A measure of the swimming ability of an individual fish species. Swim performance is compared to culvert water velocities to properly size culverts so they are passable for local fish species.

Take – Regarding federally listed species, take is defined by the Endangered Species Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The USFWS' implementing regulations define harm as "an act or omission which actually injures or kills wildlife, including acts which annoy it to such an extent as to significantly disrupt essential behavior patterns, which include, but are not limited to, breeding, feeding or sheltering; significant environmental modification or degradation which has such effects."

Temporary non-suitable habitat (lynx) – Recently harvested or naturally disturbed (e.g., burned) areas that have fewer than 180 saplings per acre at least 6-feet tall, or less than 40 percent total stand canopy cover, but have the potential to be forested suitable lynx habitat over time.

Temporary road – A road built using the minimum standard necessary for the anticipated use, which following use is reclaimed. Drainage structure(s) must be removed at the end of the temporary use period. Applicable best management practices would be implemented on these roads.

Timber permit – A commercial timber sale that does not exceed 100,000 board feet of timber, or, in cases of an emergency, such as salvage sales, does not exceed 500,000 board feet of timber.

Total maximum daily load (TMDL) – Section 303(d) of the federal Clean Water Act directs states to develop TMDLs that regulate the amount of pollutants released to water quality limited water bodies. Use of TMDLs is incorporated into an overall state strategy for bringing a polluted water body into compliance with water quality standards.

Total potential lynx habitat – The total habitat acres that are within habitat types considered to be preferred by lynx. Preferred habitat structure may or may not be present on some acreage included under this designation. Total potential lynx habitat includes the habitat subsets of (1) suitable lynx habitat and (2) temporary non-suitable habitat.

Transition lands strategy – A process described in the HCP by which DNRC and USFWS can incorporate changes in land ownership and use within the HCP project area over the 50-year Permit term.

Unforeseen circumstances – Changes in the circumstances affecting a species or geographic area covered by a conservation plan that could not reasonably have been anticipated by plan developers and the Service at the time of the conservation plan's negotiation and development, and that result in a substantial and adverse change in the status of the covered species (50 CFR 17.3).

Visual screening – Vegetation and/or topography providing visual obstruction capable of hiding a grizzly bear from view. The distance or patch size and configuration required to provide effective visual screening depends on the topography, and/or type and density of cover available.

Wetland management zone (WMZ) – A specified area adjacent to and encompassing an isolated wetland or adjacent to a wetland located next to a stream, lake, or other body of water where specific resource protection measures are implemented (ARM 36.11.403 (94)).

Wetland – An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include marshes, swamps, bogs, and similar areas.

Winter foraging habitat (lynx) – Sawtimber stands within lynx habitat that possess multi-layering of moderate or well stocked coniferous vegetation and horizontal cover. Winter foraging habitat consists of stands that must exhibit the following minimum structural characteristics: (1) stands must occur on habitat types preferred by lynx; (2) stands must have one or more of the following species present: subalpine fir, grand fir, or Engelmann spruce; (3) stands must have at least 10 percent canopy closure in trees greater than or equal to 9 inches diameter at breast height (i.e., sawtimber category in the DNRC stand level inventory database); and (4) stands must have a minimum of 40 percent total stand crown density in understory and overstory combined.

Winter period (bears) – The bear denning season, November 16 through March 31.